

List of Claims:

Claims 1-27 (cancelled)

Claim 28 (previously presented): A method of encoding a speech signal, said method comprising:

processing said speech signal to generate a plurality of frames, wherein each of said plurality frames includes a plurality of subframes;

coding a previous subframe of said plurality of subframes using Code-Excited Linear Prediction to generate a previous excitation signal; and

applying short term enhancement using said previous excitation signal to enhance a current excitation signal for a current subframe.

Claim 29 (currently amended): The method of claim 28, wherein said short term enhancement is achieved by using several ~~a main~~ pulses from said previous ~~subframe~~ excitation signal to generate one or more short term enhancement pulses based on short term correlation ~~between said previous subframe and said current subframe.~~

Claim 30 (cancelled)

Claim 31 (currently amended): The method of claim 28, wherein said short term enhancement is achieved by weighting said previous excitation signal by a current weighting filter to estimate correlation peaks at a distance ~~within said current subframe.~~

Claim 32 (currently amended): The method of claim 31, wherein said short term enhancement determines ~~around~~ less than five peaks and gains per each sub-frame from said previous excitation signal.

Claim 33 (currently amended): The method of claim 31, wherein said current excitation signal pattern is constructed using $P(n) = C \sum_i G_i \cdot \delta(n - T_i) + \delta(n)$, where G_i is a gain, T_i is a distance for an i th peak, and C is a coefficient, wherein T_i is smaller than pitch period.

Claim 34 (previously presented): The method of claim 33, wherein gains and distances are calculated by maximizing correlations of previous excitation signals in a weighted speech domain.

Claim 35 (currently amended): The method of claim 33, wherein short term enhanced ~~ment pulses are~~ excitation is generated by performing a convolution operation of $P(n)$ with said ~~previous~~ excitation signal.

Claims 36-37 (cancelled)

Claim 38 (previously presented): An encoder for encoding a speech signal, said encoder comprising:

a speech processing circuitry configured to process said speech signal to generate a plurality of frames, wherein each of said plurality frames includes a plurality of subframes;

a coding circuitry configured to code a previous subframe of said plurality of subframes using Code-Excited Linear Prediction to generate a previous excitation signal; and

a short term enhancement circuitry configured to apply short term enhancement using said previous excitation signal to enhance a current excitation signal for a current subframe.

Claim 39 (currently amended): The encoder of claim 38, wherein said short term enhancement is achieved by using ~~several a main~~ pulses from said previous excitation signal subframe to generate one or more short term enhancement pulses based on short term correlation ~~between said previous subframe and said current subframe~~.

Claim 40 (cancelled)

Claim 41 (currently amended): The encoder of claim 38, wherein said short term enhancement is achieved by weighting said previous excitation signal by a current weighting filter to estimate correlation peaks at a distance ~~within said current subframe~~.

Claim 42 (currently amended): The encoder of claim 41, wherein said short term enhancement determines ~~around~~ less than five peaks and gains per each sub-frame from said previous excitation signal.

Claim 43 (currently amended): The encoder of claim 41, wherein said current excitation signal pattern is constructed using $P(n) = C \sum_i G_i \cdot \delta(n - T_i) + \delta(n)$, where G_i is a gain, T_i is a distance for an i th peak, and C is a coefficient, wherein T_i is smaller than pitch period.

Claim 44 (previously presented): The encoder of claim 43, wherein gains and distances are calculated by maximizing correlations of previous excitation signals in a weighted speech domain.

Claim 45 (previously presented): The encoder of claim 43, wherein short term ~~enhancement pulses are~~ enhanced excitation signal is generated by performing a convolution operation of $P(n)$ with said ~~previous~~ excitation signal.

Claims 46-47 (cancelled)